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SCREENING SITE INSPECTION
IMPLEMENTATION PLAN
FOR

SITE ASSESSMENT
SECTION

RUEBEN MURRELL

EPA ID NO. ILD984769240

BVWST PROJECT NO. 70550

Sampling

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SECTION

October 10, 1991

For B&V Waste Science and Technology Corp.

Prepared by: *John J. Quinn*

Date: *10/10/91*

Reviewed by: *John P. Culbertson*

Date: *Oct. 10, 91*

Approved by: *Scott W. Anderson*

Date: *10/10/91*

For U.S. Environmental Protection Agency, Region V

Approved by: *Alan Altman*
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Date: *1/2/91*

For Illinois Environmental Protection Agency

Approved by: _____
DLPC

Date: _____

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1.0 Introduction

1.1 Confidentiality

THIS DOCUMENT IS CONFIDENTIAL. It contains predecisional information that is not to be released without the approval of the U.S. Environmental Protection Agency (USEPA).

1.2 Preparation

B&V Waste Science and Technology Corp. (BVWST) prepared this implementation plan (IP) for the USEPA under ARCS contract No. 68-W8-0064.

1.3 Objectives

This implementation plan has three objectives:

1. Determine CERCLA eligibility.
2. Document the presence, quantity, and type, or absence of, uncontained or uncontrolled hazardous substances onsite.
3. Determine area and site characteristics.

1.4 Quality Assurance/Quality Control

The *Quality Assurance Project Plan for Region V Superfund Site Assessment Program*, dated September 27, 1991, documents the QA/QC protocol for site inspection activities unless otherwise stated.

2.0 Site History

The Rueben Murrell site is located in a rural area southwest of Decatur, Illinois, west of the intersection of Joynt and Hill Roads. It is in the SW 1/4, NE 1/4, Section 22, T 16N, R 1E, in Macan County. Figure 1 is a site location map.

Rueben Murrell's property was entered on CERCLIS on February 10, 1989 as a result of a request for discovery notice submitted by the State of Illinois.

2.1 Site Operations

Structures on the Murrell site include a house which they reside in and a three bay cinderblock garage. A grass lawn is maintained around the house. The remainder of the 17 acre site is a fenced pasture used by two horses owned by the Murrell's. Woodlands border the pasture on the south, east, and west sides. Rueben Murrell and his wife have resided at the site since at least 1977. A sketch of the site is shown in Figure 2.

In 1982, the Macon County Health Department received a complaint stating that property north of Rueben Murrell's residence was being used as a refuse disposal area. According to the health department there have been several complaints in reference to this area in the past several years. Combustible and non-combustible rubbish, bulky wastes, construction and demolition wastes, and non-putrescible industrial waste was reportedly dumped in the pasture north of the Murrell residence. Allegedly Mr. and Mrs. Murrell were responsible for the dumping.

2.2 Storage/Disposal Methods

A site reconnaissance inspection was conducted by the IEPA Division of Land Pollution Control on September 19, 1989. Two circular areas, approximately 15 feet in diameter, were stockpiled with bags of mowed grass. Some scattered garbage was

noted, but wasn't present in a significant amount. Three automobiles and a piece of machinery were stored in the pasture. A small pool, probably created by rainwater, was noted in the pasture also. Along the south wall of the garage, 2 empty 35 gallon drums were noted. Some oil has been spilled in this area, possibly from oil changes, leaking/spilled drums, or automotive repairs. The BVWST inspection team noted oil stained soil in and around the garage and driveway area.

2.3 Areas of Concern

Waste oil and oily waste dumped in the garage and driveway areas has potential to reach shallow aquifers. A private well exists onsite, but is not used for drinking water due to the hardness of the well water.

Contamination of soil by the discarded oil and waste is also a concern. If the wastes discarded onsite should include any CERCLA - regulated substances, there exists the potential for release of these substances into the environment. Such releases could pollute air, soil, and surface water immediately and perhaps eventually affect groundwater.

2.4 Current Status

Rueben Murrell and his wife still reside at the site. Rueben Murrell's son, Rueben Murrell Jr., owns and operates a waste hauling business and utilizes the site garage and driveway as maintenance areas for his garbage trucks.

The site is currently unkempt with trash and garbage strewn about the garage area and the southern half of the pasture. Oil stained soil is prevalent along the driveway and adjacent to the garage.

3.0 Reconnaissance Findings and Observations

A BVWST inspection team composed of John Quinn and Tim Moody arrived at the Murrell site at 9:15 a.m., Wednesday, September 18, 1991. It had rained the previous night and the ground was slightly damp. Rueben Murrell and his son, Rueben Murrell Jr., met the inspection team on the driveway. They told the inspection team IEPA had visited a landfill on a hill southeast of the residence. Rueben Murrell bought the landfill from his brother, Arnold Murrell, who is deceased. No dumping has occurred there since he bought it. This Screening Site Inspection, however, is concerned with the residence of Rueben Murrell.

The site is Rueben Murrell's home residence located on Hill Road, about four houses west of Joynt Road, southwest of Decatur, Macon County, Illinois. The property consists of a house and three-car cinderblock garage, a grass lawn south of the house, a driveway east of the house and south of the house and garage, and a pasture north of the garage. The property is easily accessible from the southern side along Hill Road. A barbed wire fence surrounds the entire pasture and separates it from the rest of the property where the house and garage are. The fencing around the pasture is in poor condition and does not restrict access from the north, east, and west. Residential housing and woodland lie east and west of the property; farmland lies directly north of the pasture. The pasture is flat, but the front of the property slopes south toward Hill Road.

The surface of the driveway is blacktop in poor condition. The driveway is covered with old tires, leaves, old mechanical parts, wire, scrap metal, two tractors, and scattered debris. The base of the driveway extending to the street is gravel and slopes downward to the south. Most of the driveway is covered with a thick, oily residue. Small puddles of water and oil were scattered throughout the driveway.

The garage contains old cars, mechanical parts, tools old tires, and garbage. It has doors, which were open, on its southern side.

A noticeable odor of garbage comes from the pasture. An area barren of vegetation is covered with garbage. A few feet south of the garbage pile, a pit (approximate dimensions: 30 ft x 15 ft x 2 ft has been excavated in the soil. The Murrells stated the pit is intended to be a fish pond. Two old cows and two horses were within the fenced area of the pasture. The entire southern half of the pasture and all of the driveway are littered with scattered garbage.

At least two dogs and three kittens were present on the site and continuously stepped through the oil and garbage. Rueben Murrell lives with his wife at the site. A private well is in their back yard, approximately eight feet north of the house. They only use the well water for bathing and washing; bottled water for drinking is brought in by Hinckly Smith because both have kidney problems and think the well water may be to hard. Several large water bottles, some full and some empty, were on the porch on the east side of the house.

Rueben Murrell Jr. does not live at this residence but works on his trucks in the driveway. His occupation is a garbage hauler. He hauls garbage to the Macon County Landfill, about one mile east of the residence. He lives a few miles from the site, but is often at the property for his own operations. His phone number is (217) 963-2862. His father's phone number at the site is (217) 963-2469.

4.0 Justification for an SSI

This segment of the implementation plan presents information supporting the need to conduct an SSI, including the threat posed to specific pathways and the population/environments potentially affected.

4.1 Supporting Information

The possible presence of CERCLA - regulated substances in the dump waste, either free or in containers, and potential for groundwater pollution was sufficient reason for the IEPA to recommend an SSI for the site.

4.2 Pathways Threatened

Although a fence encloses the pasture with its waste pile and scattered garbage, the risk of direct contact with potentially harmful wastes exists in the driveway area. Should CERCLA-regulated substances be present, a potential risk is inherent to children who may traverse the pasture area.

A potential exists for releases of hazardous material, including waste oil, into shallow groundwater aquifers.

4.3 Populations/Environments Potentially Affected

A number of residences in the immediate area may be impacted.

5.0 Proposed Sampling Plan

Unless otherwise noted, the samples will be tested for the Target Compound List (TCL) and Target Analyte List (TAL) in the Quality Assurance Project Plan of June 12, 1991.

Sample locations and/or number of samples can be changed or eliminated by the field team leader because of site conditions existing during site inspection. The reason for any change or elimination will be documented by a change request and approved by the BVWST Project Manager.

5.1 Soil

A total of four soil samples will be taken at the Murrell site. Approximate sample locations are shown in Figure 2. One sample to establish background levels will be collected in the front yard of the Murrell residence. Two soil samples will be taken in the pasture within areas barren of vegetation or with significant waste piles. A fourth sample will be taken near the garage/driveway to assess potential waste oil contamination in that area.

5.2 Groundwater

One groundwater sample will be collected from the Murrell's private onsite well. The exact location of said well was not determined during the reconnaissance visit and is not shown in Figure 2.

6.0 Work Summary

These are the specific tasks to be completed during the screening site inspection:

1. Interview site owner(s) representative(s).
2. Photograph site and surrounding area.
3. Screen site with detection devices for substance occurrence and safety information.
4. Collect environmental samples.
5. Dispose of investigative derived waste.

During the SSI, BVWST will follow the health and safety protocol detailed in the Site Health and Safety Plan (HASP). BVWST anticipates workers will be properly protected during these tasks using these levels of personal protective equipment (PPE):

<u>Task*</u>	<u>Anticipated Level</u>
1	D
2	D
3	D
4	D
5	D

* When performing the indicated task, the field team will be prepared to advance to the next level of personal protection above that listed.

7.0 Estimate of LOE Hours

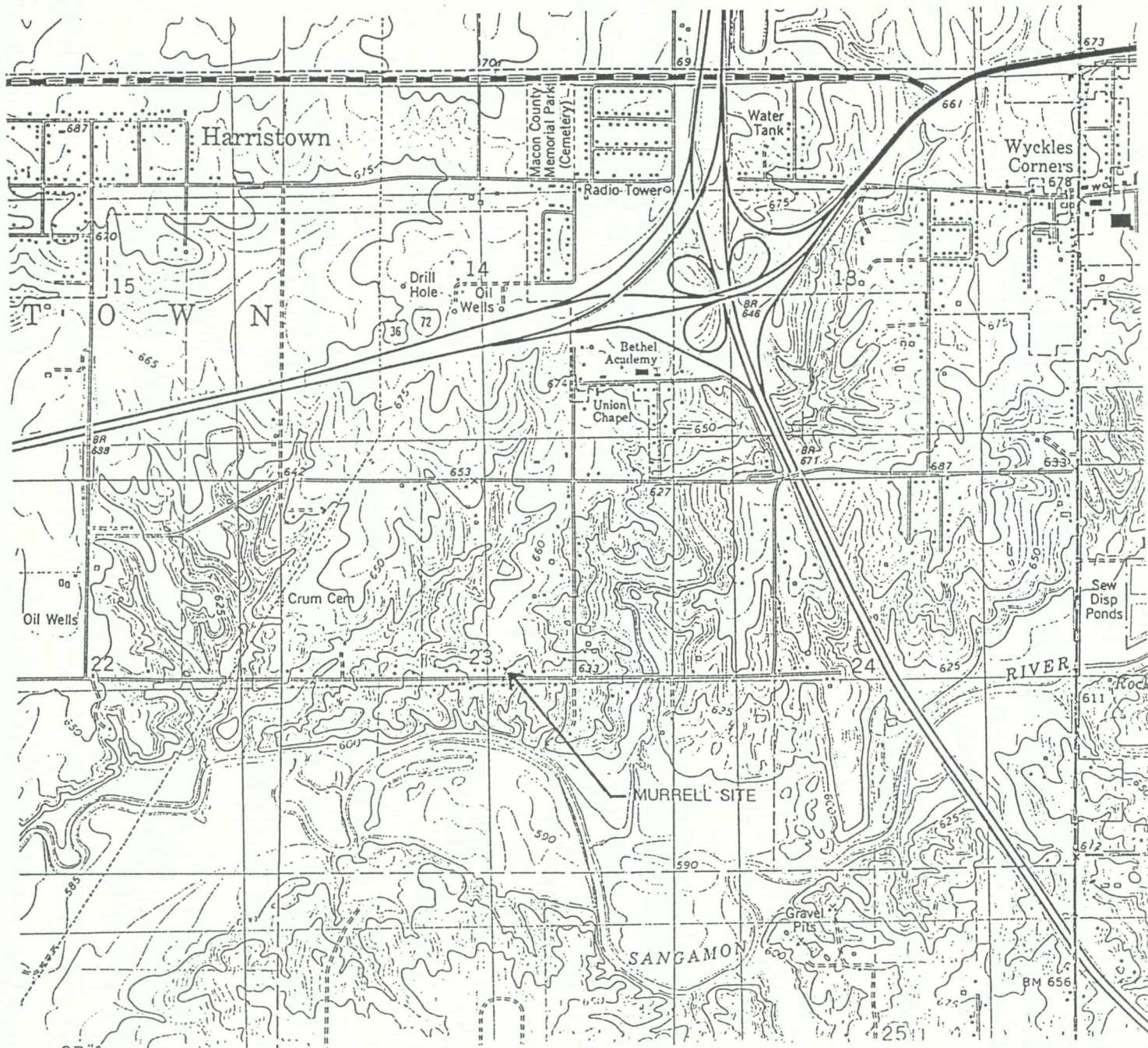
1. Number of field team members:
Reconnaissance team--two persons.
Field sampling team--five persons.
2. Number of days for field work (actual on-site activities):
Reconnaissance/interview--one day.
Sampling--two-and-one-half days.
3. Estimated Level of Effort (LOE):
 - a. Pre-Field Work: 100
 - b. Travel: 16
 - c. Field Work: 118
 - d. Post-Field Work: 30
 - e. Report Preparation: 152
 - TOTAL: 416

8.0 Projected Schedule of Milestones

Milestone	Begin	Complete
Pre-Field Work	8/07/91	10/11/91
Travel/Field Work	8/18/91	11/22/91
Post-Field Work	11/25/91	12/27/91
Report Preparation	12/02/91	3/27/92

References

1. Illinois Environmental Protection Agency, "CERCLA Preliminary Assessment Report," Rueben Murrel - Macon County, ILD984769240, March 16, 1990.



SOURCE: USGS Harristown, ILL 7.5' quadrangle 1982

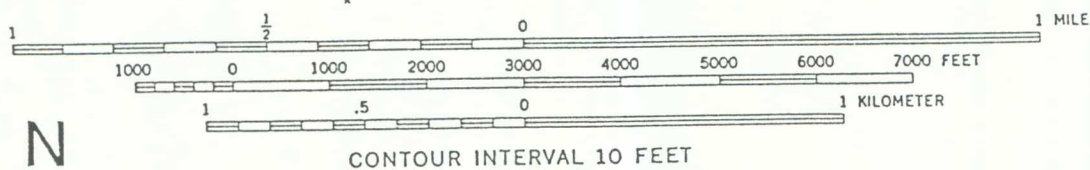
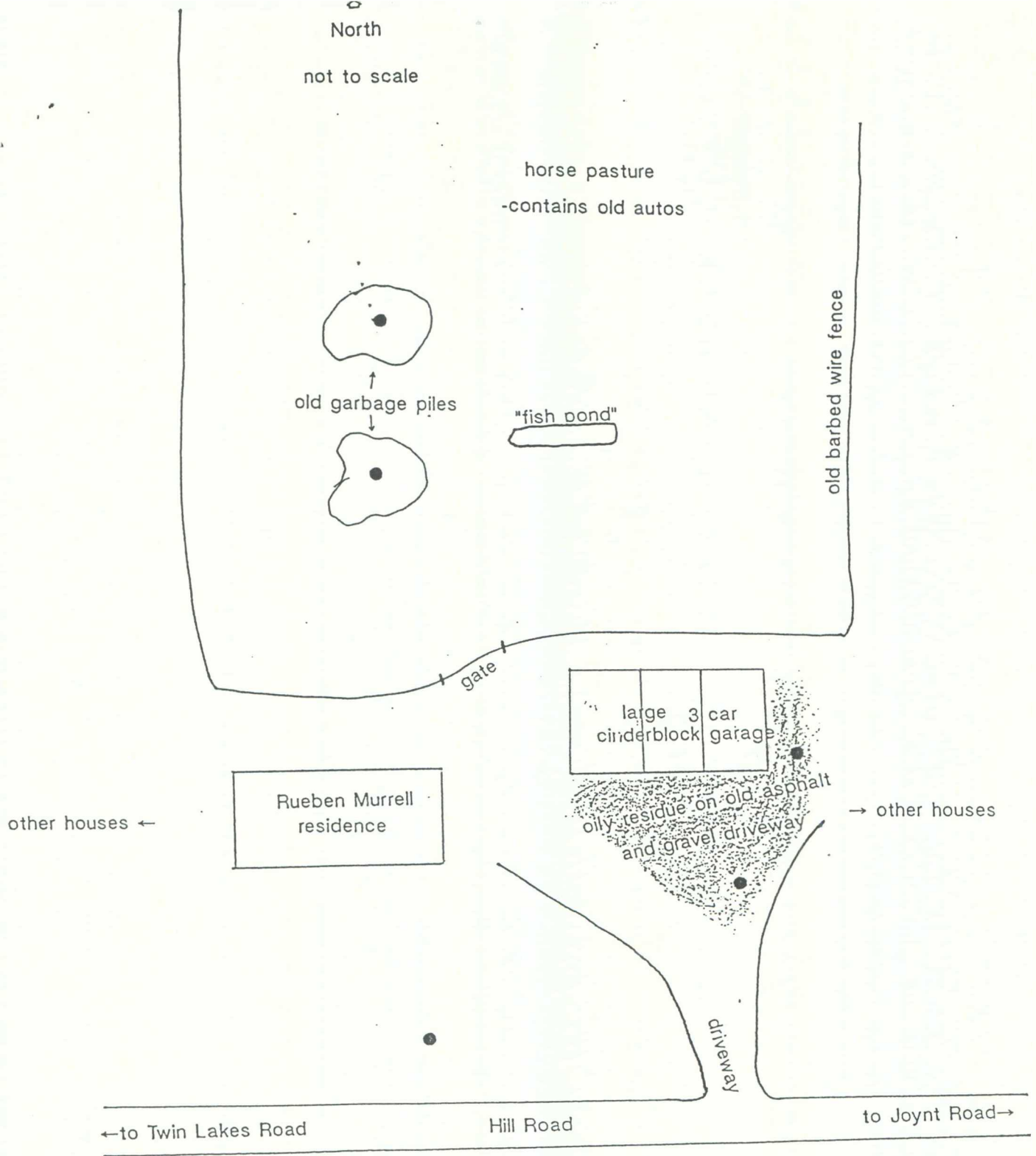


FIGURE 1. Rueben Murrell Site Location



Rueben Murrell
Figure 2. Site Map

● approximate soil sample location